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[IL/IL]; 46/63 Leon Blum Street, 33855 Haifa (IL).
BLASBERGER, Dina [IL/IL]; Havered Street 8/3, 43523 Raanana (IL).

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(74) Agents: **BRAINARD, Charles, R.**; Kenyon & Kenyon,
One Broadway, New York, NY 10002 et al. (US).

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(71) Applicant (*for all designated States except BB, US*): **TEVA PHARMACEUTICAL INDUSTRIES LTD.** [IL/IL]; 5 Basel Street, P.O. Box 3190, 49131 Petah Tiqva (IL).

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(71) Applicant (*for BB only*): **TEVA PHARMACEUTICALS USA, INC.** [US/US]; 1090 Horsham Road, P.O.Box 1090, North Wales, PA 19454-1090 (US).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **ETINGER, Marina, Yu** [IL/IL]; Ha-Savion 14/1, Nesher 36822 (IL). **YUDOVICH, Lev, M.** [IL/IL]; Taanach 24/10, 32161 Haifa (IL). **YUZEFOVICH, Michael** [IL/IL]; Yad Labanim 198/9, 32687 Haifa (IL). **NISNEVICH, Genady, A.** [IL/IL]; Netiv Hen 81/70, 32688 Haifa (IL). **DOLITZKI, Ben, Zion** [IL/IL]; Lochame-Hageto St., 49651 Petach-Tiqva (IL). **PERTSIKOV, Boris** [IL/IL]; Netiv HaRimon 4, 36781 Nesher (IL). **TISHIN, Boris**

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(54) Title: SYNTHESIS AND PURIFICATION OF VALACYCLOVIR

(57) Abstract: The present invention relates to protected valacyclovir, N-tert-butoxycarbonyl-L-valine 2-[(2-amino-1,6-dihydro-6-oxo-9H-purin-9-yl)methoxy] ethyl ester, and a method of making it. The present invention further relates to a method of making valacyclovir including the steps of coupling an amine protected valine selected from N-tert-butoxycarbonyl valine and N-formyl valine with acyclovir using a coupling agent to form a protected valacyclovir, and deprotecting the protected valacyclovir to form valacyclovir or a pharmaceutically acceptable salt thereof. The present invention further relates to valacyclovir in pure form, a method of making pure valacyclovir, and to compositions containing pure valacyclovir.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : CO7D 473/18

US CL : 544/276

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 544/276

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAS Online

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97/25989 (GLAXO GROUP LIMITED) 24 July 1997. See Page 8 lines 24-29)	22-23, 35-45
A		1-21, 24-34
X	US, 6107302 A (CARTER et al) 22 August 2000. See col.6, lines 45-49	22-23,35-45
X	WO 98/03553 (Industriale Chimica S.R.L.) 29 January 1998 See page 11, Example 11	35-45
A	US 6218568 (DVORAK et al) 17 April 2001. See Reaction Scheme A and Column 7 lines 29-31	1-45



Further documents are listed in the continuation of Box C.



See patent family annex.

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"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E"	earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
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"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703)305-3230

Authorized officer

Mark L. Berch

Telephone No. 703-308-1235